Cell Guidance Systems Ltd, Babraham Research Park, Cambridge CB22 3AT, UK

Data Sheet

Research Use Only

Compound Name

SU5402

Alternative Names

SU-5402, 2-[(1,2-Dihydro-2-oxo-3H-indol-3-ylidene)methyl]-4-methyl-1H-pyrrole-3-propanoic acid

Catalog Number

SM99

Activity

SU5402 is a potent and selective vascular endothelial growth factor receptor (VEGFR) and fibroblast growth factor receptor (FGFR) inhibitor. Multiple myeloma studies suggest that SU5402 inhibits FGFR3 phosphorylation *in vitro*. Additionally, SU5402 has been observed to inhibit IL-1β-induced MAPK activity.

Effect

SU5402 is used in an embryonic stem cells (ESC) culture method with three inhibitors (3i: SU5402 for FGFR, PD184352 for ERK, and CHIR99021 for GSK3). It has been showed that this 3i method is extremely instrumental in establishing and culturing germline-competent ESC. It inhibits embryonic left-right determination and exhibits potent anticancer activity *in vitro* and *in vivo*.

Purity

>98%

CAS

215543-92-3

Formula

$C_{17}H_{16}N_2O_3$

Molecular Weight

296.32

Solubility

DMSO

Stability

Stable at -20 ^{o}C. Keep away from direct sunlight.

References

1. Sun, L., et al. 1999. J Med Chem. 42(25): 5120-5130. PMID: 10602697

2. Tanaka, Y., et al. 2005. Nature. 435(7039): 172-177. PMID: 15889083

3. Kiyonari, H., et al. 2010. Genesis. 48(5): 317-327. 20162675

4. Hirabayashi, M., et al. 2013. Transgenic Res. 22(2): 411-416. PMID: 22875289